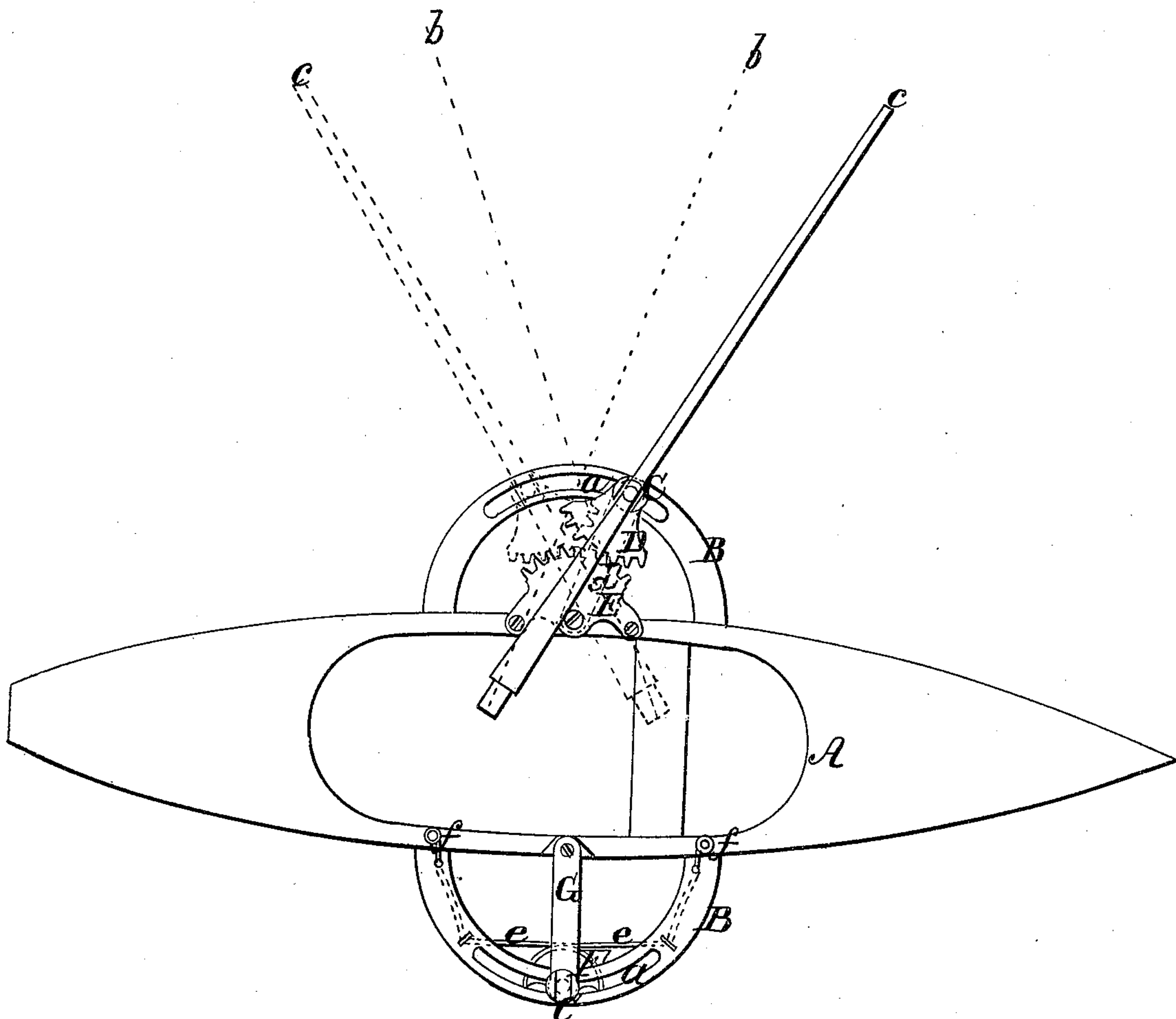


W. Fuzzard.

Oar Lock.

N^o 67,285.

Patented July 30, 1867.



Witnesses
Thos Lusche
W. F. Fuzzard

Inventor
Wm Fuzzard
Per Munn & Co
Attorneys

United States Patent Office.

WILLIAM FUZZARD, OF CHELSEA, MASSACHUSETTS.

Letters Patent No. 67,285, dated July 30, 1867.

IMPROVED ROW-LOCK.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM FUZZARD, of Chelsea, in the county of Suffolk, and State of Massachusetts, have invented a new and improved Application of Row-Locks to Boats; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming a part of this specification.

This invention consists in applying row-locks to boats, in such a manner that instead of the row-locks being fixed or stationary, as hitherto, they will be altered to move under the action of the oars, in a direction towards and from the operator or oarsman, while in the act of rowing, and thereby materially increase the length of the stroke or sweep of the blade of the oars, and correspondently augment the efficiency of the same in their propelling action.

The accompanying drawing represents a plan or top view of a row-boat with my invention applied to it.

A is the boat, constructed in any of the known styles or forms, and having at each side of it a semicircular bar, B, firmly secured or attached; said bars projecting horizontally from the boat, and each having a curved slot, *a*, made through it, through which the lower parts of the row-locks C pass, and are allowed to move freely back and forth in the slots. The row-lock, which is fitted in the slot of one of the bars B, has a toothed segment, D, attached, which gears into a segment, E, firmly secured to one side of the boat, as clearly shown in the drawing, and by having the row-lock connected with this gearing the former will be moved as the oar is moved in the act of rowing, to wit, moved from the oarsman when the inner ends or handle portion of the oars are drawn towards him, and moved towards him when the inner ends or handle portions are shoved outward from him, the row-locks, therefore, moving in a direction corresponding with that of the outer parts or blades of the oars, thereby materially increasing the length of the sweep of the blades, and augmenting their efficiency or propelling power in a corresponding degree or ratio. With fixed row-locks, the sweep of the oars is designated by the dotted red lines *b b*, but with the movable row-lock, the length of sweep is increased to the points *c c*, as clearly indicated in the drawing. The row-lock is retained in proper position by means of a radius-bar, *d*, shown in dotted lines attached to its lower end, and pivoted to the segment E, concentric therewith.

Various plans may be devised for effecting this movement of the row-locks. On the opposite side of the boat to that where the plan just described is applied, the row-lock has a segment, F, attached to its lower end, and to the ends of this segment cords *e e* are attached, which cross each other, and are connected to the ends of the bar B, or to the gunwale of the boat, as shown at *f f*, a radius-bar, G, retaining the row-lock in position. By this modification the same movement will be given the row-lock as by the plan first described.

I do not confine myself to any particular means or arrangement of means for thus giving automatically a movement to the row-lock from the oars, for an indefinite number of plans may be devised for the purpose.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The application of row-locks to a row-boat, in such a manner that the former will, during the operation of rowing, be moved automatically from the motion of the oars for the purpose of increasing the length of the sweep of the same, substantially as set forth.

WILLIAM FUZZARD.

Witnesses:

S. A. POWERS,
JOHN SABINE.